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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/839,300

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Yuefeng Liu

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EXAMINER

NGUYEN, PHUONGCHAU BA

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/839,300	<b>Applicant(s)</b> LIU, YUEFENG	
	<b>Examiner</b> Phuongchau Ba Nguyen	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 and 37 is/are allowed.
- 6) ☒ Claim(s) 27-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Claim Rejections – 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 27–36 are rejected under 35 U.S.C. 102(e) as being anticipated by Kompella (7,136,374).

Regarding claims 27 and 32,

Kompella discloses transport networks supporting virtual private networks, and configuring such networks. Kompella discloses *a method for communicating between a first private network* (network at site 0–fig.2) *and a second private network* (network at site 3–fig.2) *configured from nodes* (CE<sub>0</sub>–CE<sub>5</sub>, fig.2, see col.7, lines 9–28 wherein the CEs to be identified with a VPN to which they belong; and col.8, lines 30–32 wherein the transport network supports a separate VPN for each of the customers) *in a public network infrastructure* (transport network 210–fig.2), *comprising:*

*means for receiving a non-tunneled packet from a source node* (CE<sub>0</sub>) *in the first private network* (site 0), see column 7, lines 2–10;

*means for determining whether the packet (from CE<sub>0</sub>) is destined for the second private network (CE<sub>5</sub> at site 5, col.7, lines 25–28 & col.8, lines 30–32), see column 7, lines 29–56;*

*(1) means for obtaining an address mapping corresponding to the destination node (inner label associated with the destination customer edge device C<sub>5</sub>, col.7, lines 40–56 & col.8, lines 2–32) and acquiring a channel key (channel identifier, col.7, lines 44–49) associated with a channel based on the determination, see figs. 2–5, 9–10, 17–18.*

*(2) means for sending the packet over a channel (LSP–label switched path, fig.6) to the destination node using the address mapping, the address mapping reflecting a relationship between (a) an internal address for the destination node for use in communicating among nodes in the second private network (inner label, 840–fig.8) and (b) an external address (outer label, 830–fig.8) for the destination node suitable for communicating over the public network infrastructure (transport network–MPLS).*

Kompella further discloses in column 7, lines 25–28 that the present invention may do so by permitting different customer edge devices (CEs) to be identified with a VPN to which they belong, and to uniquely within a VPN, address, such as CEs.

Regarding claims 28 and 33, Kompella further discloses when the data packet sending from an end-station CE<sub>0</sub> to CE<sub>5</sub>—fig.2, the packet is encapsulated with the inner label for transmission to a destination node CE<sub>5</sub> in the transport network, see 440–450, fig.4, (corresponding to *means for adding the external address to the packet*)

Regarding claims 29 and 34, Kompella discloses all the claimed limitations, except (1) *encrypting the packet*.

However, in the same field of endeavor, Howe (US 2005/0094640) discloses encrypting key to all data in transit, see 0009 (corresponding to (1)).

Therefore, it would have been obvious to an artisan to apply Howe's teaching to Kompella's system with the motivation being to provide secured data being accessed with authorization.

Regarding claims 30 and 35, Kompella further discloses forwarding tables 340-fig.3 for mapping the destination of packet of the first customer edge device of a VPN network to the destination customer edge device of another VPN network, see also figs.4-5 and fig.7, col.11, lines 35-48 (corresponding to *(means for accessing the address mapping based on a determination that the packet is destined for the second private network.))*).

Regarding claims 31 and 36, Kompella further discloses in fig.7, col.11, lines 35-48 for looking up for a match of input port number and the outer label corresponding to *"determining whether an address mapping exists for a destination address in the packet"*.

*Allowable Subject Matter*

3. Claims 1-16, 37 allowed over the prior art.

*Response to Arguments*

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phuongchau Ba Nguyen  
Examiner  
Art Unit 2616



STEVEN NGUYEN  
PRIMARY EXAMINER